the study of this organ than the Callidina parasitica, Gigl., previously investigated by me. I can now, therefore, in this point fully confirm the descriptions of the germi-vitelligene since given by Tessin (Zeitschr. f. wiss. Zool. Bd. xliv. pp. 273 et seqq.) and Zelinka (ibid. pp. 396 et seqq.).

EXPLANATION OF PLATE VI.

All the figures relate to Paraseison asplanchnus, and the letters have the following signification :--

- a. Aperture of the sexual organs. a. Œsophagus. d. ej. Ductus ejaculatorius. ov. Ovary. dr. Glands of the head and neck. st. Stomach. dt. Dorsal feeler. t. Buccal feelers. te. Testes. du. Efferent duct of the female v.d. Vas deferens. sexual organs. f. Pedal glands. wg. Aquiferous vessel. q. Brain. x. Doubtful organs. m. Muscle. y. (ma. Masticatory apparatus. z. Flicker-organs. o. Buccal aperture. Fig. 1. Female animal, \times 230. Fig. 2. Neck, \times 275. Fig. 3.* Section through the cuticle of the trunk. Fig. 4.* Hinder extremity of the tail. Fig. 5.* Anterior end of the head, seen in front. Fig. 6. Head, \times 550. Fig. 7.* Tail. Fig. 8.* Masticatory apparatus seen from the side. Fig. 0.* Masticatory apparatus seen from below.
- Fig. 10. Deposited ova, \times 120.
- Fig. 11. Spermatophore after treatment with solution of potash.
- Fig. 12. Spermatophore in the natural state.
- Fig. 13. Trunk of the male, \times 275.

The figures marked with an asterisk have no indication of the amount of enlargement.

BIBLIOGRAPHICAL NOTICES.

A Flora of Hertfordshire. By the late A. R. PRYOR, B.A., F.L.S. Edited for the Hertfordshire Natural History Society by BENJAMIN DAYDON JACKSON, Sec. L. S. With an Introduction on the Geology, Climate, Botanical History, &c. of the County, by JOHN HOPKINSON, F.L.S., F.G.S., and the EDITOR. London : Gurney and Jackson, 1887. 8vo, pp. viii & 588.

To edit a botanical work by one like the late Mr. Pryor, whose work we have been led to expect would at least equal, if not surpass, some of the latest of our County Floras, was no light task; and probably Mr. Jackson has acted wisely in not materially interfering with the MS. of the author, as he distinctly states he has not in the preface. The inference from this will be that, so far as the actual Flora itself is concerned, Mr. Jackson's work has to a great extent been mechanical, hence he can hardly be held responsible for any opinions it may express.

One small matter is to be heartily approved of—that is, the full references given under the generic and specific names; anyone who has worked at local botany will for this be most thankful.

The work consists of a Map of the county showing the Botanical divisions arranged under the river-basins. An Introduction, treating of the Stratigraphical Geology, with two Maps, Hydro-geology, Climate, Botanical districts, Botanical History, and list of Contributors. Following this comes the list of the Flowering Plants and higher Cryptogams, occupying 496 pages; an appendix of "Additional published stations"; "Cryptogamia," with 12 pages; a "Tabular Statement of Plant-distribution in Hertfordshire and neighbouring counties," of 31 pages; a Summary of this; "Additions and Corrections," and Index.

Looking through the Flora itself, which it should be stated is arranged according to Nyman's 'Conspectus Floræ Europææ,' there are a few things that call for notice. No time of flowering is given for any plants in the body of the work, which, Mr. Jacksón rightly says, "to be of any use should be drawn from actual local observation." The Thalictrum from Royston is given as T. Jacquinium (following Nyman). If this is the same as the Cambridgeshire Gogmagogs plant, the writer of this doubts it; he has vainly tried to get that determined by continental experts, having grown it for several years past. In the Violets, V. sepincola and permixta of Jordan are placed under odorata (following Babington); they may technically be so placed, but naturally they are hirta forms, and so show themselves under cultivation. The locality for Silene nutans. "Garden wall one or two plants for last 22 years," followed by "Native," is not following in the footsteps of our great topographical authority, Mr. H. C. Watson. Webb and Coleman, in their ' Flora Hertfordiensis,' very rightly place the mark of non-nativity to the plant. It might be contended that it follows (in the flora) the words "English-Germanic" and applies to them; if so, it at once loses its local signification, and that alone can be accepted in a County Flora. In the same genus another species, S. conica, is recorded as native, the record running thus :---" Three plants in the middle of a fifty-acre field near High Down," with a reference to the 'Journal of Botany.' Whether we are to accept the ! given after this locality as a record of a specimen received, or of actually seeing the plant in situ, is not plain; the note in the 'Journal of Botany' would seem to say the former. Anyhow the record is a most unjustifiable one (as a native), and one can hardly tell how Mr. Pryor could have accepted it as such. It is only perhaps to be explained on the supposition that here "field" may really mean Ann. & Mag. N. Hist. Ser. 6. Vol. ii. 8

"Field"—*i. e.* an open sheep-walk, its meaning in some of the eastern counties. If so, the plant might possibly be native though extremely doubtful. It is one of those species that appear some years in profusion and in the next can hardly be found; at least such is the experience of the writer in E. and W. Norfolk on the "Breck" lands and sea-cliffs. Here and there the British botanist will find "forms" the names of which he is not familiar with, as under *Silene Cucubulus*, p. 61, at p. 112 &c.

The Rubiseem to have been better worked out than the Roses; surely there are more forms of *canina* in Herts than those given. Is not the reference under *Hieraciam vulgatum* v. *maculatum* (p. 254) a slip? Smith's plant was hardly the same as this. On page 269 Pyrola rotundifolia is accepted as a Herts species: surely this (at least) should have been queried; there is no intimation that Mr. Pryor had seen a specimen, and it is a rare southern plant, although it does occur in Kent! The query after "Cambs" under *Eriophorum latifoliun* may be expunged; there are specimens in Smith's herbarium at the Linnean Society "from Parson Holme."

It seems somewhat remarkable that Herts should possess Carex lepidocarpa, Tausch., and no other form of C. flava, L.; yet elsewhere in Britain lepidocarpa is a rare form. On pago 440 Mr. Pryor substitutes Carex gracilis, Curtis, for C. acuta, L. (1753), yet writes C. vulgaris, F., for C. Goodenovii, Gay.

The species of the county are those mostly representing the flora of the Thames basin, with some rarities, and a few absences that are rather remarkable.

Of the first may be named Lythrum Hyssopifolia, Libanotis montana, Bulbocastanum Linnæa, Melampyrum cristatum, Orchis militaris, Aceras Herminium, Carex paradoxa, Phleum phalaroides, &c. Of the latter may be mentioned Corydalis claviculata and Viola palustris.

Thesium humifusum is very rare in the county on the chalk. There seems something about this species in its distribution in our country that is peculiar; why is it not a Kent plant? Yet within a few miles of the Kentish border in Surrey it abounds in exactly the same ground as occurs in Kent, without apparently any special physical conditions. Alchemilla vulgaris is a species that is tolerably common in Herts; yet in Surrey, Middlesex, and Kent it is very rare; why? With about the same natural, physical, and geological conditions there is yet something needed to explain these anomalies of distribution.

On closing this Flora, one of the latest additions to our counties, the writer of this owns to a disappointment felt, which he thinks he is justified in saying he is not alone in. One cannot but deeply regret the death of its author, and feel that the work of two men (good and true), Webb and Coleman, in their 'Flora Hertfordiensis' (far in advance of its times as it was), would have been carried to a higher standard had he lived to give it to the world.

ARTHUR BENNETT.